

WHAT IS CLAIMED IS:

1. A thin-film magnetic head comprising:  
a lower core layer;  
a gap layer formed directly on the lower core layer or  
on a lower magnetic pole layer provided on the lower core  
layer; and  
an upper core layer formed directly on the gap layer or  
on an upper magnetic pole layer defining a track width  
provided on the gap layer;

wherein the gap layer comprises NiP, the P content of  
the NiP being in the range of 11 mass percent to 14 mass  
percent.

2. A thin-film magnetic head according to claim 1,  
wherein the P content is in the range of 12.5 mass percent  
to 14 mass percent.

3. A method for making a thin-film magnetic head  
comprising a lower core layer comprising a magnetic material  
and an upper core layer comprising a magnetic material  
opposing the lower core layer provided with a gap layer  
therebetween, the method comprising the steps of:

- (a) forming the lower core layer by plating;
- (b) forming the gap layer directly on the lower core  
layer, or forming a lower magnetic pole layer on the lower  
core layer and then the gap layer on the lower magnetic pole

